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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 09/726,880 | 11/30/2000 | Chyi-Cheng Chen | 20223 US (C38435/120240) | 1470 |
| 7590 | 11/02/2005 | | EXAMINER | |
| STEPHEN J. BROWN, ESQ. BRYAN CAVE LLP 1290 AVE. OF THE AMERICAS 33rd floor NEW YORK,, NY 10104 | | | CHANNAVAJJALA, LAKSHMI SARADA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1615 | |

DATE MAILED: 11/02/2005

*Restarted action dated 6-9-05
due to change of address not
processed in palm that was
dated 8-8-03. B.V.*

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,880

Applicant(s)

CHEN ET AL

Examiner

Lakshmi S. Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Receipt of request for reconsideration and declarations dated 3-28-05 is acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3-28-05 has been entered.

Claims 1, 3-15 and 17 are present in the instant claims.

In response to applicants' declaration and remarks filed 3-28-05, examiner has withdrawn the rejections of record and the following rejections have been applied:

Double Patenting

Claims 1, 3-15 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,162,474.

Applicants agreed to file a terminal disclaimer in their previous response (dated 11-17-03) and therefore the rejection has been maintained.

Response to Arguments

Applicant's arguments and declaration filed on 3-28-05 with respect to the rejection(s) of claim(s) 1, 3-015 and 17 have been fully considered and are persuasive.

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Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as follows:

Claim Rejections - 35 USC § 102

Claims 1, 7-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,120,761 to Finnan.

Finnan discloses a method of making free-flowing spray dried edible powder comprising oil, wherein the emulsion is made by gelatin and the edible oil is preferably vitamin E (abstract, col. 3, lines 22-44). The process of forming an emulsion of oil results in droplets of edible oil (col. 6, lines 7-42). In particular, Finnan discloses an example of spray-dried powder comprising vitamin E, gelatin, moisture content etc. (col. 10, lines 1-19) and the powder particles having a size of 74 to 250 microns, which includes claimed particle sizes. Thus, Finnan anticipates instant claims.

Claim Rejections - 35 USC § 103

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,120,761 to Finnan.

Finnan, discussed above, fails to teach the claimed ratios of fat-soluble vitamin to the matrix. However, the example (10) of Finnan shows that vitamin E and the rest of the composition is roughly in equal proportions that is within the scope of claim 13 of instant application. Further, Finnan recognizes that a complete and stable emulsion formation is important for the entire edible oil (vitamin E) to be completely in the droplet

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form (col. 6, line 14). Finnan also recognizes that the molecular weight of gelatin also plays a role in the formation of stable oil emulsion (col. 6, line 15-42). Therefore, in the absence of any criticality established with respect to the ratios of vitamin to matrix, it would have been obvious for one of an ordinary skill to optimize the amounts of gelatin and vitamin E so as to achieve complete emulsification of Vitamin E in gelatin and spray dry the emulsion to produce a powder composition having a particle size of 74 to 250 microns without agglomeration.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,971,852 to Brenner et al (Brenner) in view of US 5,120,761 to Finnan.

Brenner teaches a process of encapsulating an oil product in a particulate form, comprising a polysaccharide matrix (col. 1, lines 12-20 and col. 10, lines 10-25). For particle sizes see col. 10, lines 25-47) Brenner teaches polysaccharide gums for matrix composition, which read on the instant claimed gums (col. 4, lines 40-50 and col. 6, 23-35), in combination with polyhydroxy compounds. Further, Brenner teaches natural and synthetic oils such as citrus oils, mint oils, fruit flavors etc., to be encapsulated in the matrix (Col. 9, lines 1-17). Brenner teaches varying the amounts of oils and matrix so as to obtain a high yield. Brenner fails to teach an oil soluble vitamin and the claimed particle sizes.

Finnan, discussed above, teaches vitamin E oil or other edible oil encapsulation in gelatin, where the process of producing the powder formulation is similar to that of Brenner. It would have been obvious for one of an ordinary skill in the art at the time of

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the instant invention to incorporate any oil, including vitamin oils of Finnan, for encapsulation in the teaching of Brenner because both Finnan and Brenner are directed to same field of endeavor (producing powder formulations of droplets of oils) and are directed to solving the same problem (stable encapsulation with high yield and low oil leakage), thus constituting analogous art. One of an ordinary skill in the art interested in producing feed or food product of vitamin E would have incorporated vitamin E oil of Finnan in place of the oils, in the teachings of Brenner so as to successfully produce a high yield vitamin E powder composition.

Claim Rejections - 35 USC § 112


Claims 1, 3-15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Instant claim recites "matrix consisting of an emulsion-forming composition selected from..", which is indefinite because it is unclear to the examiner if the matrix consists only one of the polymers listed or does it have more components than the polymers". If the latter is true then, the expression "consisting of" is not proper because it is a closed expression limiting to only the polymer. A clarification and correction is requested.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Lakshmi S Channavajjala
Examiner
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June 8, 2005